

APSAC PRACTICE GUIDELINES



The American
Professional Society
on the Abuse of Children®

In partnership with



Strengthening Practice Through Knowledge

Thank you for your interest in this publication from The American Professional Society on the Abuse of Children. APSAC is a non-profit professional society dedicated to translating research into best practices in child maltreatment prevention and all forms of legal and clinical intervention. We are funded almost completely by membership dues and revenue from publications and training. Please consider [making a contribution](#) or [joining APSAC](#) to enjoy all benefits we offer members!



The American
Professional Society
on the Abuse of Children[™]

Strengthening Practice Through Knowledge

In partnership with



www.apsac.org www.nyfoundling.org @TheNYFoundling

Practice Guidelines

Challenges in the Evaluation of Child Neglect

Copyright © 2008 All rights reserved by the American Professional Society on the Abuse of Children (APSAC) in Partnership with The New York Foundling. **No part may be reproduced without a citation including the following:**

Author: APSAC Taskforce **Title:** Challenges in the Evaluation of Child Neglect **Publication Date:** 2008 **Publisher:** The American Professional Society on the Abuse of Children (APSAC) **Retrieved from:** <https://www.apsac.org/guidelines>

APSAC encourages broad distribution of the document in its entirety. No pages may be omitted when reproducing this document in electronic or print versions. Any questions regarding use of this document should be directed to info@apsac.org. Learn more about APSAC at www.apsac.org.

Table of Contents

Introduction.....	3
Definition	3
Classification.....	3
Identification	4
Etiology.....	5
Risk and Harm in Child Neglect.....	7
Physical Injury	8
Ingestion.....	9
Illness	10
Cognitive and Psychosocial Development.....	12
Infancy to Preschool	13
Primary School.....	14
Adolescence	14
Adulthood	15
Neglect Associated With Caretaker Drug Abuse.....	15
Assessment/Investigation of Neglect	16
Role of Child Protective Services (CPS) Worker	17
Role of Law Enforcement.....	21
Role of Forensic Interviewer.....	23
Role of Medical Provider.....	24
Role of Child Protection Attorney and Criminal Prosecutor	25
Conclusion	28
Task Force Members.....	29
Appendix A: Sample Guidelines for MDT Collaboration in Child Neglect.....	29
Appendix B: Checklist for Living Environments to Assess Neglect (CLEAN) Datasheet...30	
Appendix C: Home Accident Prevention Inventory (HAPI) Datasheet	31
Appendix D: Sample Questions for Forensic Interview on Child Neglect.....	32
Appendix E: Physical Exam Template for Suspected Child Neglect	34
References.....	36

The Challenge of Child Neglect

Introduction

Child neglect is consistently the most frequently reported type of maltreatment, accounting for greater than 60% of maltreatment reports in 2005.¹ And while rates of substantiated cases involving physical and sexual abuse declined significantly in the 1990's (by 36% and 47%, respectively), such was not the case for child neglect. The latter showed fluctuating rates, with only a 7% total decline.² Yet despite its prevalence, it is arguably the least understood form of child maltreatment, lacking either a consistent definition³ or a uniformly applied classification system. The purpose of these Guidelines is to give a broad overview of the current understanding of child neglect, using an evidence-based approach to focus on the impact of neglect on children, and the multidisciplinary approach to child neglect evaluations. Specific discussion of intervention strategies is beyond the scope of this work.

Definition

Neglect is sometimes defined as an act of omission on the part of a caregiver, with the focus on the failure of a given individual(s) to provide necessary care for a child. State statutes, both civil and criminal, use this type of definition. Such necessary care typically includes food, clothing, shelter, medical needs, supervision, emotional needs and educational opportunities. This focus on the act (or omission) of the caregiver is similar to that of physical and sexual abuse, and is consistent with the idea of neglect as a form of maltreatment. A more expansive definition focuses not on the caregiver but on the child, such that neglect occurs when a child's basic needs are not met, regardless of the person or circumstances contributing to the problem.⁴⁻⁶ This ecological model takes a less punitive approach to neglect, and emphasizes that the child's needs should be the primary focus of consideration, rather than placing blame on one or a few persons. Such a definition considers modifiable and nonmodifiable factors at the level of the child, caregiver, family, community and society, in general.

Classification

While classification systems differ,⁷ the American Humane Society⁸ defines four major types of neglect including 1) physical neglect (inadequate food, clothing, hygiene, shelter, and supervision, as well as abandonment), 2) emotional neglect (including engaging in chronic or extreme intimate partner abuse in the presence of the child, allowing a child to use drugs or alcohol, refusing or failing to provide needed psychological care, and inadequate nurturance/affection), 3) educational neglect (including chronic truancy; failure to enroll a child in school; failure to provide adequate home schooling or to attend to special education needs) and 4) medical neglect (including failure to provide appropriate medical and dental care for a child). While inadequate supervision may be considered "physical neglect" it is often helpful to consider it as a separate subtype (supervisory neglect), since it varies from the other types in significant ways.⁷ It often involves discrete "critical" events, which may have obvious (and

catastrophic) immediate consequences. In contrast, other types of neglect (e.g. educational and some types of psychological and physical neglect) typically lack critical events and are characterized by their chronicity and insidious harm.

Identification

The difficulty with definition is reflected in difficulty with identification of child neglect.⁹ Many express concerns that cultural, socioeconomic, ethnic and racial biases influence the decision regarding the presence and severity of neglect in a family. Studies actually have shown relatively little variation in opinions of various groups regarding what does and does not constitute neglect.¹⁰⁻¹³ In one study comparing the attitudes of professionals attending a child neglect workshop with those of Caucasian middle income mothers, African American middle income mothers and African American, lower income mothers, all three caregiver groups had a lower tolerance for potential physical neglect than did the professionals. Both African American groups rated vignettes of potential physical neglect more severely than the Caucasian mothers. When rating vignettes of potential psychological neglect, the two middle income groups tended to perceive the conditions more severely than the lower income and professional groups.¹¹ However, all three caregiver groups tended to rate the physical and psychological neglect vignettes quite severely. This and other studies suggest the American cultural view on the basic needs of children may be relatively consistent across various subgroups, and in some cases may be more conservative than the professionals evaluating neglect.

Adding to the problem of identifying neglect is the fact that in the majority of cases (some isolated cases of extreme supervisory neglect notwithstanding) neglect is characterized by repetitive, ‘sub-threshold’ events and chronic conditions, often with no clear “critical event” to be identified. As the Child Protective Services (CPS) and law enforcement responses are triggered by critical events, the very nature of neglect poses inherent difficulties in recognition and appropriate response. It is crucial for those working in the investigation and intervention fields of child neglect to understand that this type of maltreatment does not require a critical event to be present, and much of the long-term damage experienced by child victims may be related to its chronic and insidious nature. Indeed, multiple studies have demonstrated that children subjected to neglect are at greater risk of significant long-term psychosocial, developmental and cognitive adverse effects than those who are physically abused or sexually abused,^{14, 15} and more severe compromise in brain development when exposed to chronic neglect situations.^{16, 17} Thus, there is a growing body of evidence to suggest that a long series of “subcritical” events and chronically poor living conditions may wreak more havoc on a child’s development than do periodic “critical” events. This point cannot be overemphasized.

That child neglect is often a persistent condition^{18, 19} is demonstrated by the very frequent occurrence of cases in which a given family has multiple CPS referrals for neglect over a number of years, often involving a series of children. This attests not only to the chronic nature of the problem (or its very high rate of recidivism), but also to the extreme difficulties faced by CPS in their attempts to effectively intervene in the process.

In one study of supervisory neglect, 57% of cases involved persistent (defined as two or more substantiated incidents within two years) or chronic neglect (two or more incidents and CPS involvement for more than two years). The average number of substantiated incidents in the “chronic” group was 5.48²⁰.

In many cases, children suffering from neglect are also victims of physical and/or sexual abuse and/or of multiple forms of neglect.^{19, 21, 22} In one longitudinal study of maltreated school-aged children, 65% had experienced more than one type of maltreatment, and 45% experienced 3 or more forms. Supervisory neglect was the most common maltreatment type and was identified in 65% of the group, while failure to provide for a child’s basic needs, and physical abuse were found in 49 and 48% of the children, respectively¹⁹. Thus, whenever a professional is assessing the possibility of child neglect, he/she also should consider the possibility of co-existing abuse. Studies have suggested a cumulative adverse effect on long-term outcome in children experiencing more than one type of child maltreatment.^{22, 23}

Etiology

According to Belsky’s ecological theory on child maltreatment,²⁴ neglect has a complex multifactorial etiology involving characteristics and conditions of the child, the caregiver and the family, as well as the community and culture. It is the interaction of these factors that determines whether or not neglect will occur. For example, while poverty may be a risk factor for neglect and may be present in a given family, it may or may not play a significant role in that family’s neglectful circumstances. It may be that the caregiver’s poor problem solving skills and the child’s chronic disabilities interact with the stressors associated with poverty, leading to neglect. It is important to remember that most children who live in poverty are not neglected. Furthermore, there are many combinations of risk factors and circumstances that can lead to situations where well-intentioned parents are unable to cope with difficult problems for intellectual, financial or emotional reasons. Dissecting out the various factors relevant in any particular case may be quite challenging, but this process is essential to adequate intervention. Risk factors for neglect are summarized in Table 1.

Table 1. Risk Factors for Child Neglect⁸⁴

<u>Child Characteristics:</u>	<u>Caregiver Characteristics:</u>
Low birth weight	Substance abuse
Prematurity	Mental health problems (especially depression)
Chronic disabilities	Cognitive delay
Genetic abnormalities	Poor motivation
	Impulsive, poor judgment
<u>Family Characteristics:</u>	
Problems in parent-child relationship	
Poor problem solving abilities	
Little knowledge of developmental/nutritional needs of children	
Poor parenting skills	
Social isolation	
High levels of stress (e.g. poverty, unemployment)	
Intimate partner violence	
Chaotic lifestyle (no permanent residence, frequent moves between friends/relatives)	
<u>Community Factors</u>	<u>Societal Factors</u>
Few resources for families	Poverty
Poverty	Limited access to health care
Little social support	Underfunded child welfare system
Poor access to health care	Inadequate educational system
High drug availability and use	Poor access to mental health assistance for adults/children

Although most caregivers do not purposefully neglect their children and sincerely want to meet their children's needs, they often lack a basic understanding of the developmental requirements of their children, and do not have the skills and tools to meet their needs. Such poorly-prepared parents may also face difficult financial situations and other adverse social circumstances, leading to ever-increasing amounts of stress which culminate in child neglect. In families where the caregivers are abusing drugs and/or alcohol, neglect of children is very common, and in those cases the worst negative effects on the children often are observed. In these families, the neglectful behavior of the caregivers will not improve until the drugs/alcohol are no longer the primary focal point in the caregiver's life. Overcoming substance abuse is all the more challenging for families living in neighborhoods with frequent drug use and availability.

Many cases of child neglect involve caregivers who themselves have significant untreated mental health issues and even psychopathology²⁵. Ironically, a significant number of those mental health disorders affecting caregivers may themselves have roots in the caregivers' own childhood experiences, including the way they were parented. Many psychological and behavioral disorders create extreme challenges in parenting, and neglect of children involved cannot be rectified without significant progress in treating

the underlying causal conditions. Limited access to medical and mental health care make adequate treatment particularly challenging.

Risk and Harm in Child Neglect

Critical to the assessment of any case of potential child neglect is a thorough analysis of risk. The potential harm incurred by a child includes far more than physical injury. It also includes the risk of adverse effects on psychosocial, cognitive and emotional development. Some of the risks discussed below are relatively minor while others are potentially lethal. Clearly the severity of the potential adverse event and the likelihood of its occurrence must be considered together. For example, although food poisoning is a relatively common occurrence, even in homes in which conditions are sanitary, it is unlikely that a child exposed to a filthy home for one hour will develop a diarrheal illness. And even were this to occur, a single episode of uncomplicated food poisoning related to unsanitary living conditions may be transiently, but only moderately, unpleasant for a child, and lead to no long-term sequelae. On the other hand, a child who is chronically exposed to that filthy home, who also is chronically dirty, living with filthy animals and/or other dirty children, and who is usually hungry--thus more likely to eat spoiled food from a dirty floor--may be at much greater risk of developing food poisoning. If that child is very young, the risk of the diarrheal illness causing dehydration and other complications is higher, as well. Thus, the risk of the event occurring and the severity of outcome are higher for the second child than the first.

In other cases the likelihood of a given adverse event occurring is quite small (a child being electrocuted from faulty wiring), but the potential consequence (death) is enormous so that a child exposed to that condition is potentially at great risk of harm. Importantly, the frequent recurrence of what may appear to be relatively benign events may have very significant cumulative effects. Each of these examples emphasize the need to consider all aspects of the child's condition, including remote, recent and current co-existing factors, rather than attending to limited aspects of a single isolated event. Each referral to CPS or law enforcement reveals a snapshot into the bigger picture of a child's entire life experience. Those evaluating the case must focus on the broader, more longitudinal view of the child to allow social service agencies to recognize the underlying causes of child neglect and design an effective and focused plan for change

Children have varying needs and they face different risks related to neglect. The risk of harm depends on multiple characteristics of the child, and these should be considered when evaluating a family for possible neglect. Such factors include age, medical and physical disabilities and cognitive abilities. Toddlers are at risk of falling headfirst into containers of water and drowning, of accidentally ingesting household cleaners, and of falling down unguarded stairs. These may not be major risks to an older child or adolescent. Children with asthma are more susceptible to the adverse effects of a dirty, moldy home than are those with no airways disease. Those who use a wheelchair may suffer to a greater extent from the massive clutter in the home, which inhibits mobility. Cognitive delays may render a child at risk under circumstances not ordinarily

problematic for children of the same chronologic age. It is critical to consider the individual characteristics of the children involved when assessing a family for neglect.

Research on the adverse effects of child neglect is extensive and spans multiple disciplines, from medicine to psychology, developmental pediatrics to neurobiology. There are inherent limitations in such research, including a tendency to group all types of neglect into one category and the failure to control for severity of neglect, the age at which neglect occurred, and other potentially confounding factors.²⁶ Nonetheless, more recent studies have incorporated control groups, larger sample sizes and a longer follow-up interval, enabling a greater understanding of the potential long-term effects. Multiple review articles summarize current knowledge.²⁶ **Several studies have demonstrated that neglected children experience worse outcomes than physically or sexually abused children and non-maltreated children over a range of cognitive, developmental, psychosocial and physical parameters.**²⁷ As described below, many of the outcomes noted early on in childhood persist into adolescence and adulthood. Evidence also is emerging that outcomes may differ according to the subtype of neglect experienced by a child.³

The myriad potential adverse consequences of neglect may be grouped as follows: physical injury, toxic ingestions, illness, psychosocial problems and cognitive/developmental delays.

Physical Injury

Potential sources of physical injury are listed in Table 2. Falling children and falling objects landing on them can lead to bone fractures, mild to severe head injury, lacerations, contusions and abrasions, penetrating injuries and other trauma. Such injuries range from mild to lethal, and may have no long-term sequelae or may lead to chronic growth problems, functional deficits, cosmetic deformities and/or cognitive delays.

Table 2. Potential Sources of Physical Injury

- Falls from: counters/changing tables/beds, unguarded stairs, unsafe balconies, upper floor windows without guards, unstable structures (e.g. collapsing floor), stacked objects.
- Falling objects landing on child
- Sharp objects (incised wounds/lacerations from broken glass, knives, razor blades)
- Standing water (Drowning)
- Pedestrian vs. auto (child playing on busy street)
- Electrocution
- Small objects (aspiration)
- Hot liquids/solid objects (Scald/contact burns)
- Strangulation (corded pacifier, high chair)
- Positional asphyxia (wedging)
- Suffocation of infants (from bedding, from piled laundry in sleeping area, from overlie)
- Unrestrained passenger in motor vehicle collision
- Restrained passenger with impaired driver
- Residential fire
- Hypothermia
- Hyperthermia (child left alone in car)
- Criminal activity in home and/or neighborhood
- Exposure to intimate partner violence
- Direct exposure to drugs or paraphernalia left laying around a home
- Attack by pet
- Unsupervised outdoor play

Children living in cluttered, substandard housing, and/or with poor supervision are at risk of fire-related injuries in the form of burns and smoke inhalation. Fireplaces lacking screens, electrical outlets lacking cover plates, exposed and frayed wires, and overloaded circuits all increase the risk of house fire. Stacks of clothing, furniture and other items (many of which are flammable) may block windows or doors, and obstruct pathways, preventing children from escaping a burning home. Poorly supervised children may start fires by playing with matches or lighters made accessible by adults in the home. One study reported that up to 30% of fire-related child deaths occurred from fires started by children.²⁸

Ingestion

Young children who are poorly supervised are at substantial risk of toxic ingestion, involving medications, chemicals, or plants found inside or outside the home. Medication ingestions may harm the body in numerous ways, but the organs most commonly damaged include the liver, kidneys and brain. These effects may be mild and transient, or severe (Tylenol ingestion requiring liver transplant) and even lethal. Intentional

administration of alcohol or adult prescription medications is also extremely dangerous. An adult dose of common pain or mood altering medications can be harmful or even fatal to an infant or toddler. Many caregivers are unaware of such effects and others choose to ignore the risks.

The most common poison exposures for young children include cosmetics, personal care products and cleaning substances. Ingestion of caustic substances in the form of highly acidic (pH <2) or alkaline (pH >12) products cause direct tissue damage and can lead to severe injury in approximately 10% of child victims.²⁹ These range from skin burns (typically of the face, neck and chest), to burns of the mouth, throat, airway, esophagus and stomach. Complications include perforation of the wall of a hollow organ, bleeding from eroded blood vessels and airway obstruction from soft tissue swelling. Long term complications include esophageal scarring with stricture formation (severe narrowing of esophagus, obstructing passage of food), and squamous cell carcinoma (cancer). The latter occurs in 1-4% of significant exposures²⁹.

Ingestion of illicit drugs is potentially extremely dangerous, and is discussed below (See “Neglect associated with caretaker drug abuse”).

Illness

Chronic malnutrition and failure to thrive (FTT) are associated with a number of short and long-term adverse physical effects. Through its influence on the immune system^{30, 31}, malnutrition increases the risk of infection and may delay recovery from surgery (poor wound healing). Bone demineralization may result in osteopenia and bone fractures with minor trauma. Overall growth (height and weight) may remain suboptimal, despite improved nutrition and ‘catch-up’ growth, so that children with a history of FTT may remain smaller than their adequately-nourished peers. Vitamin and mineral deficiencies may lead to a variety of abnormalities of the skin (e.g. increased pigmentation, rashes), mouth and eyes (inflammation), and nervous system (e.g. seizures, abnormal tone, problems with balance). Anemia may occur with iron and/or B12 deficiency, and heart problems (cardiomyopathy) with lack of selenium³². Effects of malnutrition on brain growth and cognitive development are discussed below.

Children who are infrequently bathed, and who live in an unsanitary environment are at increased risk for a variety of illnesses (see Table 3).³³⁻³⁵ Infections associated with ingestion of spoiled food typically are caused by viruses,³⁶ and by a varied group of bacteria, the most common being *Campylobacter*, *Salmonella* and *Shigella*.^{37, 38} These cause diarrhea (with or without blood), abdominal cramps, fever, chills and vomiting.³⁹ The effects usually are transient but in 2-3% of cases adverse effects may last months to years. There is evidence linking food-borne illness to long-term complications such as Guillan Barre and reactive arthritis.⁴⁰ Diarrheal illness in the very young can lead to significant dehydration and electrolyte changes, at times requiring hospitalization. Young children also are more likely to develop infection than are older children and adults. Some of these organisms require very small infectious doses to cause disease. As an example, *E. coli* may cause infection with as little as 10-100 units.⁴¹

Table 3 Illnesses Associated With Neglect

- Food poisoning
- Infection from contaminated living environment (animals, pests, dirt and refuse)
- Secondary wound infection
- Skin injuries from vermin
- Untreated or inadequately treated medical conditions (common conditions: eczema, asthma, diabetes)
- Increased spasticity in children with cerebral palsy from lack of proper medication
- Multiple problems related to special needs children, including methods of feeding (e.g. site infections, equipment malfunction)
- Inadequate immunizations
- Oral infection from dental neglect
- Malnutrition/Failure to thrive/Starvation
- Lead poisoning
- Overdose caused by leaving adult medications or controlled substances within reach of the child
- Ear infections/impacted cerumen/hearing loss

Children living in a dirty environment also are at increased risk of secondary wound infection, which may range from relatively minor cellulitis (infection of the surrounding soft tissue) or abscess formation, to sepsis (bacterial infection of the bloodstream). The primary injuries may stem from accidents associated with hazardous surroundings and/or poor supervision, or vermin bites associated with chronic infestation.

While considerable harm may occur to an individual child victim of neglect, the public health implications of neglect also should be considered. A chronically dirty child living in a filthy, unsanitary home is more likely to spread disease to classmates, daycare playmates, neighbors and adults coming in contact with the child. If such children work in the food industry, this carries important implications for outbreaks of infectious disease. The secondary transmission rate for *E. coli* 0157 has been estimated to be 17%, for *Salmonella*, 17% and for *Campylobacter*, 16%.⁴² Physically neglected children may shoplift food and other basic items they are unable to obtain in the home. In short, the adverse effects of child neglect not only impact the affected child and family, but also are likely to impact the general public.

There is a growing body of evidence to suggest that child neglect is associated with an increased risk of significant health problems in adolescence and adulthood. Clark and colleagues showed that adolescents with low-parent involvement were more likely to develop alcohol use disorders than their counterparts.⁴³ In their study of adolescent health consequences of maltreatment, Hussey and colleagues showed that physical neglect and supervisory neglect were associated with self-reported fair/poor health.⁴⁴ Children living in households with food insecurity have been shown to be at increased risk of fair/poor health and hospitalizations since birth relative to children in food secure homes.⁴⁵ Dirty and neglected children have been found to be at greater risk of adult obesity (odds ratio

9.8) than averagely groomed children.⁴⁶ Moreover, adults reporting childhood neglect have been shown to be at increased risk of liver disease⁴⁷ and ischemic heart disease⁴⁸.

Cognitive and Psychosocial Development

Studies of animals (primarily rats and nonhuman primates) subjected to early maternal deprivation, and of human children adopted from Romanian orphanages after severe physical and emotional neglect, have shown significant and sustained cognitive deficits and behavioral abnormalities⁴⁹⁻⁵⁴. Rutter and colleagues found severe developmental impairments at the time Romanian orphans were adopted into UK families (all adopted before 2 years of age), with the mean Denver Quotient in the mildly retarded range. Impressive catch-up development was noted by 4 years of age, with children adopted before 6 months of age scoring comparably to the comparison group (UK adopted children placed before 6 months), although those children adopted between 6-24 months still showed mild deficits relative to the comparison children⁵¹. In another study of Romanian orphans, severe gross and fine motor, as well as language delays were found in 10 of 10 children at the time of adoption. At the time of follow-up (mean age 8.8 years old), the parents described the children as having largely caught up to peers in gross motor skills, but reported continued concerns related to mild, more specific fine motor skills, language, and attentional deficits, and problems achieving in school⁵⁴. Formal neuropsychological testing supported the parental descriptions. The children in this study also displayed severe behavioral abnormalities at the time of adoption, with some difficulties persisting at follow-up. Initially, all 10 had prominent symptoms such as absence of crying or expressing pain, failure to seek out nurturance from caregivers, rocking, head-banging, and persistently mouthing objects. At the time of follow-up, they displayed continued abnormal behaviors, including impulsivity, hoarding food, difficulties getting along with peers, and alternations between excessive emotional expression and absence of any expression at all.

There is a growing body of evidence to suggest that early deprivation is associated with significant biochemical, functional and morphologic changes in the brain. Animal and human studies have demonstrated abnormalities in the physiologic response to stress in deprived subjects, and these changes often persist in later life^{52, 53, 55-57}. Alterations have been found in growth hormone secretion, in the hypothalamic-pituitary-adrenal axis and in the noradrenergic response to stress. Long-term changes in local brain functional activity have been identified by evaluating glucose metabolism via positron emission tomography (PET scan). Notably, the areas of decreased glucose metabolism are interconnected and are known to be involved in the brain's response to stress⁵⁴. Sanchez and colleagues found a decrease in the size of the corpus callosum (a structure essential to communication between the two halves of the brain), as well as cognitive deficits in monkeys experiencing early maternal deprivation.⁵⁸

Inasmuch as significant early deprivation causes stress in infants and young animals, it is helpful to examine the research on the neurobiology of stress and trauma⁵⁹⁻⁶¹. There is evidence that chronic, significant stress may cause permanent changes in the brain, ranging from neuron (brain cell) death, to suppression of new neuron production and

changes in connections between neurons. These changes have tremendous implications related to a child's response to fear and stress later in life, to personality development and social interactions, to acquisition of memory and to cognitive functioning. Some regions of the brain are more susceptible to the adverse effects of stress than are others, and the vulnerable regions may change according to the developmental stage at which the stress occurs. Particularly vulnerable areas include the corpus callosum, the amygdala (important in fear response and control of aggression), hippocampus (involved in memory retrieval and interruption of inappropriate behavior), cerebellum (important in attention, cognition, language and affect) and prefrontal cortex (exerts control over the brain's stress response). Further research into the biology of stress and of neglect may help guide efforts to prevent the long term adverse effects.

The long-term consequences of malnutrition and FTT on brain development, as well as cognitive and psychosocial development vary with the child, and are likely influenced by environmental and social variables such as parental education and socioeconomic status⁶². Oates and colleagues studied adolescents with a history of non-organic failure to thrive (that which is not associated with an identifiable physical cause, a subset of which is secondary to neglect) and found that compared to children matched for age, social class and ethnic group, the study children had lower scores on the verbal intelligence scale of the Wechsler Intelligence Scale for Children-Revised, poorer language development and less well-developed reading skills. They also demonstrated lower social maturity and an increased incidence of behavioral disturbances⁶³. Mackner et al⁶⁴ studied the cumulative effect of non-organic FTT and child neglect on cognitive performance in infants and toddlers. They found that those children suffering from both non-organic FTT and neglect had lower scores on cognitive functioning than the children with only one of these conditions. This data suggests that children whose FTT is related to neglect are at higher risk for a worse outcome because of a cumulative effect from both the malnutrition and the neglect. It also suggests that children being evaluated for non-organic FTT should be evaluated for the possibility of neglect, as well. On the other hand, neglect should not simply be assumed when assessing a child with FTT.

Beyond consideration of children with marked FTT and those experiencing severe global deprivation in orphanages, a range of cognitive deficits and behavioral problems have been identified over the long-term in other children who have been neglected. These will be discussed according to age group.

Infancy to Preschool

Infants who are subjected to neglect have an increased rate of anxious attachment¹⁵. Data from the Minnesota Mother-Child Interaction Project showed that 39% of infants of 'psychologically unavailable' mothers had anxious-avoidant attachment, while 45% of physically neglected infants (without concomitant physical abuse) had anxious/resistant attachment. At age 2 years, neglected children showed more anger, frustration and difficulty in problem-solving than their abused or non-maltreated peers.²⁷ A history of psychological neglect has been associated with internalizing and externalizing behavior

problems in 3-year-olds.⁶⁵ Additionally, adjustment problems, low self-esteem and negative affect have been identified in neglected preschoolers¹⁵.

Developmental delays also have been demonstrated very early in life. Physically neglected children in the Minnesota Project described above had lower scores on the Bayley Scales of Infant Development (BSID)⁶⁶ at 24 months than did nonmaltreated children ($p < 0.01$)²⁷. Of particular note was the actual decline in functioning demonstrated by those in the 'psychologically unavailable' group: between 9 and 24 months of age, their mean scores on the BSID dropped from 120 to 84. In a study of the interaction of maltreatment on language development, Allen and Oliver found that child neglect (and not child abuse or abuse combined with neglect) was found to predict auditory comprehension and verbal ability in preschoolers⁶⁷.

Primary School

Behavioral problems continue in this age group, with many children demonstrating aggression toward, or withdrawal from, peers²⁷. These children tend to be disliked by their peers. They have difficulties with attention and with comprehending school work, which may contribute to their learning problems. It is not uncommon for them to be diagnosed with attention deficit/hyperactivity disorder, oppositional defiance disorder or autism. Bolger and colleagues reported that physical neglect in the form of failure to provide was correlated with children having fewer reciprocated playmates and that lack of supervision was associated with lower self-esteem¹⁹.

When neglected children start school, they are at increased risk of learning difficulties in multiple critical areas, including math and language.⁶⁸ They have a higher rate of grade repeats and school absences than their non-neglected counterparts. In one study of 6-year-olds identified as physically neglected, 65% were referred for special educational services. On the Wechsler Preschool and Primary Scale of Intelligence (WPPSI)⁶⁹, these children scored significantly lower than nonmaltreated counterparts on comprehension ($p < 0.001$), vocabulary ($p < 0.01$) and animal house ($p < 0.01$) subtests²⁷. In another study, neglected children in elementary school had significantly lower grades in Math and English than their nonmaltreated peers⁷⁰.

Adolescence

Behavioral and academic problems persist into adolescence. Children with a history of neglect are at increased risk of running away from home, being arrested as a juvenile,⁷¹ being arrested for a violent crime,⁷² engaging in prostitution,⁷³ and abusing drugs.^{21, 44} They are at increased risk of depression^{44, 74} and personality disorders.⁷⁵ Those who stay in school are at increased risk of continued poor academic performance, increased risk of grade repeats, truancy and suspension from school^{14, 70} relative to non-maltreated children. Subsequently, high school graduation rates are significantly decreased relative to non-maltreated children.^{14, 71}

Adulthood

As adults, those with a history of child neglect have been shown to have lower IQ scores, and in one study of adults with a history of abuse or neglect, greater than 50% demonstrated reading skills in the deficient range.¹⁴ This has clear implications for future employment and increases the risk of financial stress, with all the associated complications of poverty. Kaufman and Spatz Widom found that adults who had been abused or neglected as children had lower occupational levels, with a median in the semi-skilled range and less than 7% employed as managers or professionals.⁷¹ Adults neglected as children are at increased risk of being arrested⁷⁶ and being arrested for a violent offense.⁷² In the absence of significant parent training, adults neglected as children sometimes repeat the patterns of their own dysfunctional childhoods. Thus, child neglect carries major consequences not only for victims, but also for society, and these consequences have the potential to affect subsequent generations.

Neglect Associated With Caretaker Drug Abuse

With the relative ease of access and the popularity of cocaine, methamphetamine and other illicit drugs, attention and concern have increasingly centered on the care of children whose guardians are abusing these drugs. Intoxicated caregivers place their children at risk for multiple types of neglect and abuse. In homes where illicit drugs are used and/or stored, children are at risk for accidental ingestion. For example, when drugs are left on the floor or tables after a party, children of various ages might unintentionally or intentionally ingest the remaining substances. They also may be given these drugs by a caregiver or other adult, either as a joke or as a method of sedation.

Children living in homes containing methamphetamine labs are at risk not only for meth ingestion, but for exposure to the hazardous chemicals used to make the drug.⁷⁷ Excellent reviews of the risks associated with exposure to methamphetamine labs are available.^{78, 79} Potential adverse effects from the chemicals include skin and eye irritation/burns, irritation of the airway (especially dangerous in asthmatic children), and toxicity to the liver and bone marrow. If a child is found in a home containing illicit drugs or methamphetamine ingredients and is showing signs/symptoms of exposure, or if it is likely that the drugs were accessible to the child, he/she should be evaluated immediately in an Emergency Department.⁷⁸ In some cases, the child will need to be decontaminated at the scene, prior to being evaluated in the Emergency Department. Many of the child's possessions may retain harmful residue of drugs and chemicals, which may lead to further exposure should the child (or investigator) have subsequent contact with them. Children in meth labs are also in danger of injury from explosions.

Substance-abusing caregivers very frequently neglect one or more of the needs of their children in the pursuit and consumption of drugs. Ironically, mothers who abuse methamphetamine may justify that consumption by claiming that it helps them stay awake and, in effect, become a "Super-Mom." In fact, chronic use of methamphetamine has the opposite effect, as such mothers tend to focus more on obtaining and using the drug than on identifying and meeting their children's needs. In addition, caregivers who

use drugs might go on “binges” of continuous drug use, followed by days of sleep during which they are completely unavailable to their children. As a result, deleterious consequences are suffered by their children. For example, toddlers may wander outside or incur injury inside, and older children may not be awakened for school, or may be unable to attend school because of the need to care for younger siblings. Children attended or unattended in homes where drugs are used and/or sold are at increased risk of sexual abuse, injury from accessible firearms, and injury from guard dogs, as well as harm from strangers involved in criminal behavior.

Assessment/Investigation of Neglect

Identification and assessment of child neglect is a process best guided by a broad definition that embraces the many factors contributing to neglect at the individual, family, community and societal levels. The range of professionals involved with the assessment may differ according to the nature of the case, the philosophy of the multidisciplinary team, and the applicable statutes.

Currently, there is debate among professionals regarding the most appropriate response to child neglect allegations. Some believe that once a case has become sufficiently severe to warrant CPS referral, the vast majority of initial assessments should be performed by CPS, alone, with multidisciplinary involvement occurring only later, for example, when a mental health provider is asked to perform a psychological evaluation of a parent. In most cases, child protective services workers should be the primary assessors, appropriately focusing services and resources toward the goal of ensuring that the basic needs of the children are met. Proponents of this view argue that for all but the most egregious cases, there is no role for law enforcement, forensic interviewers or the criminal justice system. ‘Criminalizing’ neglect hinders the ability of CPS workers to engage families, build effective relationships and foster lasting change. Neglect is much different than physical or sexual abuse, and should be treated differently. Given the complex, multifactorial etiology of neglect, many circumstances are beyond the control of the caretaker. Thus, the latter should not be blamed for the conditions, but only helped to alter them.

Other professionals believe that while most cases are appropriately handled by CPS, in many cases of chronic, serious neglect, early and consistent collaboration of CPS, law enforcement and other members of the MDT allows for a more thorough evaluation of the circumstances and better decision-making regarding the well being of the child. The varying areas of expertise and the multiple perspectives of MDT members help to increase the likelihood of a positive outcome. While the ultimate goals of MDT members may differ, some of their immediate objectives are the same, making collaborative work advantageous. For example, the CPS worker assessing the child’s safety and the law enforcement officer determining whether or not a crime has occurred both need to consider the child’s risk of harm and the responsibilities and actions of the caregiver. That these professionals have access to different resources and use very different techniques to evaluate emphasizes the advantages of collaboration. Multidisciplinary teamwork also ensures a more equivalent response to cases that are initially reported to police versus those reported to CPS. Finally, proponents of multidisciplinary

collaboration argue that some cases of chronic neglect in which CPS efforts have been unsuccessful in motivating appropriate change may be suitable for criminal prosecution. This is in addition to the cases of egregious neglect, and those involving obvious criminal acts. Combining the CPS assessment with a law enforcement investigation, and CPS resources with criminal justice resources, allows a graduated and appropriate response to a form of maltreatment that is as harmful as physical or sexual abuse.

The use of the MDT and the criminal justice system to address child neglect is within the discretion of the community. A useful way to determine an appropriate response to these cases is to develop a multi-disciplinary task force. The task force can evaluate the severity of child neglect in a community and the resources available to address this form of maltreatment. Each multidisciplinary team may then define the best approach for their community in the form of interagency agreements and a protocol. **Appendix A** provides an example of how one county decided to collaborate in cases of possible child neglect.

The following sections describe the potential roles for MDT members in the assessment/investigation of child neglect. The actual level of involvement of each professional will vary with the case and with the community.

Role of Child Protective Services (CPS) Worker

Essential to the role of the CPS worker is the necessity of considering the present conditions in the context of the history of ALL prior CPS referrals, assessments and interventions, as well as prior medical documentation regarding concerns of neglect. Among CPS referrals, even prior unsubstantiated reports regarding the child and/or the siblings should be reviewed and may take on a new meaning when seen in the light of a long history of similar behavioral patterns. (In some states, complete review may be precluded by mandated ‘purging’ of information after a given time interval, or if a case is unsubstantiated.) A thorough review will help guide the present assessment, and prevent repetition of unsuccessful strategies. It also will help to place the current concerns in perspective. The seventh or eighth referral for neglect should be treated differently than the first, and clearly represents a pattern of chronic inability to meet the child’s needs. As described previously, chronic maltreatment may have severe and long-lasting effects. It is essential to view the allegations of chronic neglect as serious as episodes of physical abuse. While neglect characteristically lacks the “critical event” around which the CPS response is structured, the chronic and pervasive nature of the neglectful conditions should be examined and treated just as seriously. If prior interventions with a caregiver have been unsuccessful, creative thinking may yield new ways to break the pattern of child neglect. Scientific research on the negative effects of chronic neglect on young children must guide permanency planning for such child victims – and prevention of permanent damage may require alternative care environments.

As with other types of maltreatment, the CPS worker’s major goal is to assure the safety of the children in the home. This involves performing a safety assessment to identify imminent danger associated with neglect, and assess for co-existing physical or sexual abuse. The worker identifies strengths within the family and capitalizes on these in an

effort to help the caregiver create a safe environment for the children. The worker links appropriate community services to help the caregiver ensure the children's ongoing safety. In some cases, education of the caregiver is all that is necessary to break the cycle of neglect. In other cases, identifying and treating underlying mental disorders, providing financial and vocational assistance, and possibly breaking the destructive pattern of addiction will be needed. The success of such efforts is in large part dependent upon the thoroughness of the assessment and the ability of the child protection team to access and coordinate needed resources. In many cases the children may remain with the caregiver during the intervention process while in others, the worker may determine that out-of-home placement is necessary to ensure the safety of the children.

In conducting a safety assessment, it is important for the CPS worker to evaluate the children as soon as possible to assess their condition, to gain a perspective regarding their immediate safety and continuing risk of harm, and to determine whether the agency needs to take steps to assure the children's safety. The latter may include assuming temporary custody or filing a petition for non-secure custody. A thorough assessment of risk may involve multiple visits to the family, observing all children in the family as well as the interaction of the parents with the children, and taking note of sibling interactions.

In determining severity of neglect, one should consider not only the degree of harm the child has already experienced, but also the nature and severity of potential harm (risk), the likelihood the child will sustain that harm, and the egregiousness of the caregiver's acts or omissions. A developmental and/or psychological assessment of the children and caregivers may be immensely helpful. In some cases, a professional who is an expert in childhood attachment should assess the child and the caregivers for potential attachment problems. Thorough medical assessment is also necessary to evaluate for evidence of physical or medical neglect, and their sequelae.

An unplanned home visit provides firsthand knowledge of the home environment and observations of family interactions in their everyday setting. It allows an assessment of the physical environment, problems and resources within the neighborhood, and family access to community resources. If the allegations are made against the non-custodial parent, a visit also should be made to that home.

An evaluation of the child's physical environment is optimized by photo and/or video documentation. As conditions in a very dirty home can be overwhelming to the CPS worker, visual documentation is invaluable in identifying important details of the environment. As discussed below, a review by a medical provider of the CPS reports as well as photographs of the home may reveal important safety and health concerns. To maximize the benefit of this review, written documentation should be as detailed as possible (since the medical reviewer will not actually visit the residence). See the section on "Role of Law Enforcement" and Table 5 for additional details of home evaluation.

A thorough assessment of a cluttered, filthy home can be a daunting task. Use of validated measures of environmental neglect, such as the Checklist for Living Environments to Assess Neglect (CLEAN),⁸⁰ or the Home Accident Prevention Inventory

(HAPI)⁸¹ may be very useful (See **Appendices B and C**) While CPS workers may have less experience using standardized assessment instruments, success has been attained in training public health nurses in Georgia⁸². The CPS worker may benefit from some of the following techniques:

- Ask the caregiver to locate a set of clothes the children could wear to school tomorrow. This avoids the necessity of searching the entire home to determine whether or not clean clothing is available.
- Ask the caregiver to locate other items, such as toothpaste and brush, soap, food for lunch and toys for young children.
- While assessing the home for potential safety and health hazards, put yourself in the shoes (and at the eye level) of the children in the home. If you are 3 feet tall, what dangerous items are within your reach? If you were 2 years old, would you be at risk of any injuries in this home? Are there clear pathways to enable a quick exit from the home in the event of a fire?
- Consider the children's mobility, potential disabilities, chronic diseases and mental health issues (e.g. Attention Deficit/Hyperactivity Disorder) when assessing for hazardous conditions.
- If there is adequate food in the home, verify with the children that they are allowed to eat it, and are not restricted to a very limited set of items.
- Ask family members if there is a fire safety plan (and if not, work with the caregiver to develop one).

In some cases the safety assessment includes the CPS worker (or other specially trained professional) performing forensic interviews of children involved in alleged neglect. This is more likely to occur in very severe cases of neglect (for example, children living in drug houses or children living in squalor and with evidence of severe, protracted deprivation). Forensic interviews are further discussed below. In many cases a formal forensic interview is not practical or desirable. In these instances, the front line CPS worker may still gain important information by using effective and appropriate interview techniques during the mandated interview in the field. Sample questions for children are listed in **Appendix D**.

Interviewing neighbors, teachers, family friends and landlords may help to establish the extent and chronicity of the neglect, as well as identify prior accidents or illnesses that may have stemmed from the neglect. Teachers may provide a great deal of information about the family. In one instance, a teacher described a youngster who was shunned by her schoolmates because of her foul odor and dirty clothes. Each day the teacher would go in early, shower the child, and dress her in clothes that had been washed from the previous day. When the child brought her science project to school it had to be wrapped in plastic because of the fleas and other jumping insects that accompanied it.

It is essential for the CPS worker to interview the caretaker about the neglect and circumstances contributing to it, but he/she must also attempt to corroborate the caregiver's statements. Third party interviews such as those described previously can be an effective way to support or refute information provided by the caregiver. Additional

information may be gathered from interviewing health care providers and accessing emergency department records. These contacts may also provide information regarding co-existing sexual or physical abuse. It is important to remind a medical provider that assisting authorities with information related to a child neglect investigation is an exception to the HIPAA regulations, as many providers are not aware of this.

Finally, interviewing other adults familiar with the family will help determine the underlying causes of the neglect, providing valuable insight into factors not only related to the children and caregiver, but also to the surrounding community. Neighbors, coworkers, teachers, grandparents and others can shed light on available resources, neighborhood cohesion and perceived safety issues, as well as common practices and beliefs in the community. This information allows the CPS worker to develop a plan of intervention that carries a reasonable likelihood of success.

Table 4 provides some key questions to consider in the assessment of alleged child neglect.

Table 4. Questions to Consider When Assessing Potential Child Neglect

- Is this a safe, stable, nurturing environment?
- Are this child's needs being adequately met?
- What role does poverty play in this case?
- What is the impact of the community/social environment?
- Does one or more of the children have special needs (chronic disability, significant prematurity, behavioral problems, etc)?
- What are the priorities of the caregiver (self vs. child's needs)?
- What are reasonable expectations for this caregiver in terms of child care/parenting?
- Is there any evidence that the caregiver has tried to meet basic standards of child care?
- What are the norms and standards for child care in this community?
- What are the resources for parents in this community? Has the caregiver used them?
- Are the present home and child care conditions the exception or the norm?
- What is the caregiver's attitude toward help and change?
- Have there been prior allegations of neglect and/or abuse? How many? Over what period of time? If there have been prior allegations, were the interventions helpful/successful? Was the caregiver cooperative? Has there been positive change since then?
- Are there caregiver disabilities or conditions that influence the ability of that person to provide adequate care (cognitive delays, mental health or substance abuse problems)?
- Does the caregiver exhibit symptoms of depression? What are those symptoms?
- What is the impact of concurrent intimate partner violence on child care?
- How does other culture/language influence the caregiver's actions? (Ideally, obtain a cultural interpretation)
- What was the caregiver's childhood like? Was she/he abused or neglected? Does his/her current behavior reflect the conditions under which he/she was raised?
- Is a full psychological evaluation or at least a mental health assessment of the caregiver likely to reveal information useful in identifying the cause of the neglect and formulating a treatment plan?

Role of Law Enforcement

The degree of law enforcement involvement in a case of child neglect depends in large part on the case, on local protocols and on state criminal statutes. Law enforcement officers may play no role in a neglect case, they may play a relatively small role providing help to the CPS worker, or they may play a large role in the investigation and assessment. For example, law enforcement may take no active part in a case of medical non-adherence. They may become more involved where neglect was severe, where a child was seriously injured or killed, or in jurisdictions where policy dictates regular law enforcement involvement. Their responsibilities are essentially the same as in other cases of child maltreatment, and include collaboration with CPS in reporting cases, initiating investigations and interviewing relevant parties. It is important to recognize that even when no criminal activity is identified, the peace officer is often the first to observe and document the signs of chronic child neglect. Thus, first responding officers should be trained in what to look for in both the environment of the child and in the child's behavior.

Law enforcement officers provide valuable input as they gather information and evidence in cases of physical neglect (When law enforcement is not involved in a particular case, many of these functions are performed by CPS workers.) Peace officers are typically responsible for photographing the residence, the children and the children's clothing. Panoramic views of rooms (to document clutter, blocked exits, and other safety issues) and close-up photographs of relevant findings (e.g. dirt/feces on the floor; easy access to chemicals, toxins; outdated dairy products) highlight the conditions and potential hazards. Such photographs may be shown to medical providers for added input regarding potentially unsafe and unhealthy conditions. In some jurisdictions photographic documentation is supplemented with a videotaped tour of the residence, which adds to the information obtained by capturing dynamic processes, such as flying insects. Detailed written reports, including descriptions of smells, sights and ambient temperature help capture the home environment. Such details are invaluable to the judge presiding in the case (typically civil court, but in severe cases, criminal court), as that person will never actually see the residence in question so it is incumbent upon the investigator to accurately portray the conditions faced by the child. In some cases law enforcement may enlist the services of a building inspector to further document safety hazards. An inspector's declaration that a residence is "uninhabitable" provides powerful evidence of the extreme nature of the situation to those making decisions about case disposition. The name of the housing unit owner is documented, as well as any attempts of the caregiver to remedy safety issues (e.g. repeated contacts with the landlord to have the heat fixed.) This helps to sort out underlying factors contributing to the neglect. Collecting and processing physical evidence also is very important, be it equipment and supplies for methamphetamine production, various illicit drugs, illegal firearms or hazardous items found in the home. Techniques for appropriate documentation are summarized in Table 5 and a sample checklist is provided in Table 6.

Peace officers also interview neighbors, teachers, landlords and other witnesses. In this way they obtain information that will help determine the existence and extent of the

neglect and will support or refute statements made by the caregiver. This type of information is extremely important, not only in determining whether or not a crime was committed, but in helping to identify the major factors contributing to the child neglect.

Often, the most important witnesses in child protection cases filed in juvenile court are the peace officers who participated in the investigation and who documented and preserved evidence relating to the neglect of the children. This is true even in situations where no crime is identified and no one is criminally prosecuted.

Most states have criminal statutes which address some forms of child neglect, and law enforcement investigators are the front-line investigators in those cases. Such cases sometimes involve children left in extremely hot or cold cars, children killed by parents who sleep with them while impaired by alcohol or drugs, children who drown in pools or bathtubs, or children killed or injured in traffic while unsupervised by adult caregivers.

Table 5. Techniques for Documentation of Conditions in Residence

- View the residence from the perspective of the children living in it (e.g. View it from the eye level of a toddler; consider age-appropriate hazards)
- Look for safety hazards in the home (structural, fire, electrical)
- Consider safety threats in vicinity of home (busy street, nearby creek, road construction)
- Look for locks on the outside of interior doors and closets
- Look for what isn't present but should be (eating utensils, soap, toothpaste, a place to sit down, school supplies, etc)
- Look for adequate sleeping arrangements for children
- Document smells, ambient temperature, presence of temperature control appliances, temperature of water
- Use abundant adjectives and other detail in written report
- Keep report fact-based and avoid speculative statements
- Consider formal evaluation by building inspector
- Document physical condition of children (including photographs)
- Consider safety of home in other situations (nighttime, during a storm)
- Document protective measures taken by personnel before and after viewing the residence
- Document evidence of animal life and potential animal neglect
- Identify objects in the home that indicate how income is spent (priorities of caregiver)
- Check to see if basic necessities are present and functioning (heat, electricity, refrigeration)
- Ask caregiver to show you fresh clothing, food, and other necessary items for the children
- Photograph or describe evidence showing the chronicity of neglect (e.g. dates on newspapers, degree of grime on floors, extent of animal feces)

Table 6. Law Enforcement Checklist for Child Neglect Investigations

- Take photographs/videotape of residence
- Photograph children
- Take relevant measurements in home
- Draw sketches of residence as needed
- Gather physical evidence
- Call building inspector as appropriate (utility personnel)
- Write detailed report
- Interview witnesses (family, neighbors, medical providers, others) to gain information regarding scope and severity of neglect and to corroborate caregiver statements
- Perform criminal background checks

Role of Forensic Interviewer

Forensic interviews of children became a method of data gathering when other methods did not resolve the question of maltreatment or when techniques were called into question. Historically, they have been employed with sexual abuse and more recently with serious physical abuse, domestic violence and drug use in the home. While not traditionally used in child neglect cases, forensic interviews may be a helpful adjunct in cases of severe neglect in which criminal charges are being pursued, such as when children are found in meth labs or physical neglect is profound. And in all cases of potential neglect in which a verbal child is involved, use of appropriate forensic interviewing techniques (even when talking to a child in “the field”) is highly desirable. Information obtained through use of these skills may supplement information from a medical examination, from observations of the child’s physical appearance, from an investigation of the child’s living environment, and from interviews of adults who have regular contact with the child. A detailed, skilled forensic interview of a child suspected of being neglected can be extremely helpful in the assessment, as the child can relate first-hand experiences and is privy to information that is unavailable to others. As is the case with any forensic interview, the goal of an interview for child neglect is to elicit accurate information in a culturally and developmentally sensitive manner while minimizing “contamination” of the child’s statement.

Appropriate persons to conduct a forensic interview include child protective service workers, Child Advocacy Center forensic interviewers, detectives or mental health professionals. The essential factor is that the person conducting the interview has received specialized training. As with forensic interviews for sexual or physical abuse, the interview will be a blend of different types of questions, with the focus being on obtaining information from open-ended questions whenever possible. Since neglect is usually not a single, salient event, (as can be the case with physical/sexual abuse) the interviewer likely will need to paint a broad picture of the child’s living conditions. Asking how things “usually” happen (“Tell me how the meals usually get prepared”), and

thus accessing script memory, is a sound practice for neglect interviews. Also helpful, and useful for timelines, are questions to access episodic memory (“Tell me about the last meal you ate”). Multiple choice questions and direct questions will be needed to obtain information that may not be provided through the use of open-ended questions (“Where was mom when the baby got sick?”), and can be followed by probes to obtain additional information from the child’s perspective (“So mom was out that night. Tell me about what happened when she came home”).⁸³ The interviewer should avoid questions that directly blame parents as children often feel the need to protect their parents. **Appendix D** lists sample questions useful for gaining information regarding multiple aspects of neglect.⁸³ The questions should be tailored to the particular case, and background information from other MDT members can be quite helpful in this regard. As always, it is important to make the child feel as comfortable as possible, document everything, and have a reason for every question asked.

Role of Medical Provider

The medical provider is important to neglect evaluations in a number of ways. The provider often is the person initially identifying neglect, typically in the form of medical non-adherence (noncompliance) or physical neglect. In this role, thorough documentation is critical. As most of the members of the MDT lack a medical background, it becomes extremely important for the provider to carefully describe and explain the health or developmental issue at hand, as well as the short and long term risks to the child should the neglect continue without adequate intervention. In terms of medical non-adherence, the written documentation should contain a basic explanation of the child’s condition, the reasons for therapy, the risks and benefits of such therapy, and the potential consequences of failing to receive therapy. Further, the provider must describe previous efforts to work with the family and include copies of any contracts made with the family regarding adherence issues. He/she should indicate whether or not any of these efforts showed partial success and discuss possible reasons why the non-adherence continues. This helps focus the assessment and intervention by the child protective services worker, and increases the likelihood of a timely and successful resolution.

Medical providers often are asked to participate in an ongoing neglect investigation and are in a position to supply key information. Children removed from unsafe and/or unsanitary homes should receive an immediate medical evaluation to determine whether or not they are experiencing physical neglect in the form of untreated health conditions or injuries, secondary wound infections, poor hygiene, dental caries, dehydration with or without malnutrition, head lice or inadequate clothing. **Appendix E** provides a sample template for the physical exam. A complete head-to-toe exam is needed, and the evaluation should be specific and detailed, with diagrams of injuries and photo documentation of untreated conditions and injuries. Descriptions should include detail regarding hygiene (including whether or not the child has a malodor), and the condition of clothing. Thorough documentation is essential and supplementary laboratory testing may be indicated in order to identify and determine the severity of abnormal conditions such as dehydration. In the latter, testing must occur promptly, before the child is rehydrated. The medical provider should be cognizant of the fact that neglect often co-

occurs with other forms of maltreatment, and look for evidence of co-existing sexual or physical abuse. This may entail ancillary testing, to include head CT, brain MRI, funduscopic exam, skeletal survey and/or laboratory testing.

After medical records are gathered, including prenatal, birth and primary care records (with growth parameters), the child should receive a comprehensive medical evaluation to assess growth and nutrition, as well as developmental status. Dental and mental health needs should be assessed. At this time referrals for further testing and/or treatment may be made (for example, referral to a developmental pediatrician for formal testing of a child with apparent delays).

The medical provider can play an important role in neglect evaluations even if he/she does not actually examine the child. In many cases of neglect, the child is removed from an unsafe/unsanitary environment, and has already undergone evaluation by another provider. The provider trained in child maltreatment may add to the evaluation by reviewing photographs or video documentation of the home, and written records provided by law enforcement and child protective services describing the conditions in which the children lived. The provider can point out specific conditions in the home that potentially jeopardize the health and well being of the children living there. He/she can describe how the children's age, developmental capabilities and health status render them particularly vulnerable (or resilient) to given conditions. Such information is most valuable if the medical provider summarizes it in a formal written report, and makes him/herself available for expert testimony if necessary.

Medical providers working with neglectful caregivers are most effective when law enforcement and CPS workers share all investigative information with them. It is not appropriate for investigative personnel to request an opinion from medical experts about the condition of the child or how it was created in the absence of full disclosure of the results of an investigation.

Role of the Child Protection Attorney and Criminal Prosecutor

Child protection actions are civil in nature. In many cases involving neglect referrals, families receive voluntary services and address the underlying causes of neglect without the involvement of any court. Generally, the only cases where a petition is filed in court are those in which the neglect is severe or the caregivers are reluctant to acknowledge, and attempt to remedy, the underlying problems. Most of those cases are ultimately successful in remedying the problems and even if the children are removed, most cases result in return of custody to the caregivers.

Successful closure of a juvenile or family court case requires objective evidence that the parents/caregivers have changed the problems or conditions that resulted in neglect of their children. This requires more than merely attending parenting courses, other didactic training, or completing anger management courses. For those parents who have been abusing controlled or prescription substances, abstinence from the prior pattern of abuse is only part of the necessary change. Other interventions are typically needed, such as

observational parenting training. In this model, professionally trained parents mentor and assist caregivers to make changes, then verify through observation and practical exercises that the caregivers have in fact internalized and applied what they have learned.

Few child neglect cases rise to the level of a criminal act. Serious cases of neglect resulting in physical or emotional injury, in permanent damage or death of the child are handled in criminal court. Cases involving intentional starvation of children when the caregiver has the means to provide nutrition, global neglect of a child by drug-abusing parents, and severe and chronic isolation of children (often coupled with emotional abuse) resulting in permanent developmental delay may well result in criminal charges. Cases involving physical abuse of children often include an aspect of neglect and such cases may involve criminal charges for both the abuse and the neglect.

The following paragraphs focus on the relatively small group of cases in which protective custody is sought and the even smaller group in which criminal charges are issued.

To make appropriate judgments about child protection actions or criminal charges, attorneys should keep in mind that a specific incident of alleged child neglect must be reviewed in the context of the family's history. One specific incident may not appear to be child neglect when considered in isolation, but may constitute child neglect as part of an ongoing, chronic neglect situation. Studying prior family behavior may also uncover a pattern of escalating dysfunction. Both the CPS worker investigating the family's case, and the law enforcement officer investigating a potential crime, should appear together at the charging conference. Ideally, this charging conference is the same for both the child protection case and the criminal case. The information that the attorneys should have at the time of review includes: law enforcement reports, CPS records of current and prior assessments(s), video recorded forensic interviews of children, medical neglect evaluations, all medical reports and information, information from building inspectors, animal control inspectors, and whatever other information is available at the time of review.

A case should never be declined for filing a child protection petition or for prosecution due to lack of information, if additional investigation might be productive. When indicated, additional information should be sought under the direction of the child protection attorney and/or the prosecutor, and both law enforcement and CPS should cooperate in the endeavor.

If criminal charges are warranted, the prosecutor either:

- 1) Issues a criminal charge and proceeds through the court system, in conjunction with the protective services case. A criminal charge should not be dismissed, and no plea agreement should be reached, without consultation with the agency that is pursuing the protective services case.
- 2) Enters into a deferred prosecution agreement (DPA), in consultation with the agency pursuing the protective services case that would require the defendant to cooperate with CPS and protect the children to avoid criminal charges. In some jurisdictions, a DPA can

be done through the courts, by issuing a criminal case, having the defendant plead guilty to the charge, then suspend entry of judgment pending the outcome of the defendant's cooperation with CPS. This is the best possible scenario, because the defendant has much more incentive to cooperate and because the case does not become stale during the time of the DPA. Any DPA should be reviewed by the prosecutor and/or the court at least one month prior to its expiration, to ensure that the defendant has complied with all terms and conditions.

In those severe cases in which criminal charges are contemplated, there should be ongoing communication between the attorney who reviews the protective services case and the prosecutor who reviews criminal charges, assuming those attorneys are different. Child protection actions must move swiftly and this may create difficulties for the timing of a criminal investigation and decision to file criminal charges, but neither process should be suspended while waiting for the other. The prosecutor must be kept informed of significant events during the course of the protective services case, even after court proceedings close, including relapses of the parent or other issues that may arise that potentially have an impact on the child's safety.

In constructing a case, the child protection attorney and prosecutor should focus on presenting as much strong and admissible evidence as is available. This includes evidence of all conduct (criminal and non-criminal) that has been conclusively shown to corroborate the existence and pervasiveness of neglect (e.g. multiple unexplained absences of the child from school; intentional neglect of needed medical care). The attorneys should also consider likely responses to the charges of neglect and whether or not these constitute legitimate mitigating circumstances. (Ideally, the MDT will have considered these possibilities early on, and directed investigation to address them.)

Issues that frequently arise as potential mitigating factors include:

- Poverty
- Imposing values in the absence of harm to the child
- One isolated 'bad' day
- The fault lies with someone other than the caregiver
- Mental illness in the caregiver
- Accident/not intentional
- The parent lacked parental training and skill and is repeating the way they were parented
- Lack of understanding of how neglect affects young children

The best preparation for a protective custody hearing or criminal trial is a thorough investigation. For instance, if poverty is raised as a significant mitigating factor, some assessment of the net worth and financial conditions of the family will help clarify the validity of this assertion. If investigation indicates that poverty is not a significant contributor to the neglect, the attorney/prosecutor should justify this conclusion. This may involve demonstrating the evident priorities of the caregivers. For example, witnesses may testify that the caregiver is consistently dressed in expensive clothes and is

well-groomed, while photographs of the home show expensive computer equipment in the caregiver's bedroom, next to a large screen TV. This stands in stark contrast to the dirty, poorly-dressed, malnourished children who lack toys and are locked in a small filthy room for prolonged periods.

In constructing the narrative, it is important to focus on hard data and concrete facts which will not be subject to serious dispute. Consider the example of a case of environmental neglect in which law enforcement officers or CPS workers entered a filthy house. The overwhelming reality of that situation is captured in photographs and videotapes of the home, which objectively document an array of filth, clutter, and unsanitary and/or hazardous conditions to which children have access. Pictures, more than words, will help a jury or judge understand that this is not simply a case of authorities imposing their values, but instead it is a case of an environment which seriously endangers the physical health of any child. In any trial involving a CPS petition or criminal neglect charge, the more concrete data, the more detail, the more objective testimony an attorney/prosecutor can present, the less likely it is that the hearing/trial will degenerate into an adversarial jousting match. Assertions that a law enforcement officer or social worker is attempting to impose their personal values onto somebody else's family, and other subjective issues will be much less likely to arise.

It is extremely important for the child protection attorney/prosecutor to help set the tone for current and future neglect investigations. If he sends the message explicitly or implicitly that he has limited interest in working and investigating cases of neglect (for civil or criminal court), this will likely influence the willingness of other team members to stay involved in a case or initiate maximum efforts on the next case. Alternatively, an attorney/prosecutor who sends a strong and consistent message that he is committed from beginning to end, dedicated to discovering the truth of the situation at hand, and resolved to ensure the safety of the child, shows his colleagues their work and effort will be appreciated and rewarded. It is clear that this ultimately helps the child whose unmet needs initiated the process.

Conclusion

As the most prevalent form of child maltreatment, neglect poses a major challenge for society, and especially for the professionals charged with its identification and assessment. The information gleaned from multidisciplinary research must provide the evidence base for understanding the problem so that we can effectively intervene to protect child victims. Well organized and multidisciplinary collaboration between professionals must be directed toward addressing issues of caregiver and family dysfunction, as well as factors in our communities and our society that lead to our failure to provide adequately for too many of our children.

Task Force Members

Co-Chair: Jordan Greenbaum, MD
 Howard Dubowitz, MD
 John R. Lutzker, PhD
 Kathy D. Johnson, M.S.
 Kari Orn, MS
 Julie Kenniston, MSW
 Amy Brown, BA
 Paxton Butler, JD

Co-Chair: Robert Parrish, JD
 Kenneth Feldman, MD
 Lori Kornblum, JD
 Anita O’Conor, MSW
 Kathleen Faller, PhD
 Lt. Lynette Hodges
 Matthew Moeser, JD

Appendix A.

**Sample Guidelines for MDT Collaboration in Child Neglect
 (Adapted from Child Abuse Review Team of Milwaukee County, Wisconsin)***

Levels of Collaboration

Level 4: Collaborative	CPS and LE work together in all aspects of investigation Goal: <ul style="list-style-type: none"> • All facts of case are gathered in a timely fashion • Each knows everything the other does • As little trauma to child as possible
Level 3: Coordinated	CPS and LE work separately but coordinate their activities
Level 2: Unilateral	Only one system is investigating
Level 1: Information only	Screen-outs

Collaboration Grid

Level 4	<ul style="list-style-type: none"> • “Abandoned” children • Young children left alone • Methamphetamine labs where children are present, or who live in homes • When LE call to request CPS assistance, cases will be flagged with a need to respond within 0-2 hours
Level 3	All CPS Same-Day and 24-hour-cases except those in Level 4
Level 2	All CPS cases with 2-5 day response time
Level 1	Screen-outs

Challenges in the Evaluation of Child Neglect **APSAC Practice Guidelines**

Appendix C.

Home Accident Prevention Inventory (HAPI) Datasheet

Home Accident Prevention Inventory-Revised Data Sheet

Family _____ Date _____
 Child _____ Session # _____
 Observer _____ Eye level Reach

Room						
Condition (B I T F)						
	Number of Hazards	Total	A/A+D	Number of Hazards	Total	A/A+D
Poison by Solids & Liquids						
Pill Meds (w/o safety caps)						
Tube meds						
Inhaler meds						
Liquid meds						
Deodorizers						
Jar meds						
Detergents & cleansers						
Polishes & waxes						
Alcoholic beverages						
Beauty products						
Insecticides & rodenticides						
Paints & stains						
Solvents & thinners						
Glues & adhesives						
Petroleum products						
Fertilizers & herbicides						
Poisonous plants						
Fire & Electrical Hazards						
Combustibles						
Protective appliance covers						
Fireplaces w/o screens						
Outlet/switch w/o plates						
Electrical cords/plugs						
Suffocation by Mech. Objects						
Plastics						
Crib cords						
Small Objects						
Ingestible small objects						
Sharp Objects						
Sharp objects						
Firearms						
Firearms						
Falling Hazards						
Balconies						
Steps						
Windows						
Drowning Hazards						
Bathubs/sinks						
Buckets						
Wading pools						
A/A+D = agreements divided by agreements+ disagreements			/	Open Garbage? _____		/
			%	Spoiled Food? _____		%

Appendix D. Sample Questions for Forensic Interview on Child Neglect*

Medical/Dental Neglect

Goal: To find out how medical/dental issues are handled in the child's family

1. Tell me about the last time you were sick.
2. Who gives you medicine?
3. Have you ever had a sore tooth?

If yes: What happened?

Environmental Neglect

Goal: To have the child describe their overall living conditions

1. Tell me what your house is like.
2. What do you like/dislike about your house?
3. Tell me about your sleeping arrangements.
4. When you go to school, are you given any homework?
If yes: Where do you do your homework?
Does anyone help you with your homework? Who?
5. Does anyone help to keep the house clean?
If yes: Who?.
6. When you run out of clean clothes, what happens?
7. Tell me about a time something in your house got broken/needed repair.

Physical/Nutritional Neglect

Goal: To assess child's nutrition and physical well-being

1. What do you usually have for breakfast/lunch/dinner?
2. Does anyone cook/prepare the food? Who?
3. Does anyone help you get clean/take a bath? Who?
4. If child is old enough to care for his/her own hygiene: What do you use to clean your body and your hair? Your teeth?
5. Are there any times when there's no food?
If yes: What do you do then?

Educational Neglect

Goal: To assess ways the caregivers meet the child's educational needs.

1. Tell me about how you get ready for school. What is (caregiver) doing when you're getting ready?
2. How do you get to school?
3. Do you ever miss school?
If yes: Why do you miss school?
4. If child is home-schooled:
What are you learning?
Who teaches you at home?
How much time do you spend each day getting home-schooled? (If child is developmentally able to provide answer)

Supervisory Neglect

Goal: To assess the circumstances during which child is left alone or given too much responsibility for their age.

1. Who's usually home at night?
2. Where does (caregiver) go when they're not at home?

Challenges in the Evaluation of Child Neglect **APSAC Practice Guidelines**

- If child indicates parent is out for a period of time or they have been left alone:
How long is your caregiver gone (assess for minutes, hours, and/or days)?
How many times has your caregiver left you alone?
3. Who takes care of your younger brothers and sisters?
If child indicates he/she is responsible for siblings:
How long do you watch your brother/sister for (assess for minutes/hours and/or days)?
What do you have to do when you're in charge?
 4. How would you get help in an emergency if you needed it?
 5. Do you ever take care of yourself alone? Tell me about the last time.
 6. Do you and/or your brothers and sisters ever leave the house without an adult?
If yes: Where do you go?
How do you get there?
 7. Tell me about what you do when you get home from school.

Poverty

Goal: To assess to what degree poverty may contribute to current problems. These questions are most appropriate for older children.

1. How does your family get money?
2. When (caregiver) has money, what do they usually spend it on?
3. Has anyone offered to help your family (relatives, agencies)? What happened?
4. Have you heard any arguments about money? What was said?

Care of Pets

Goal: To determine whether pets are neglected or mistreated.

1. Who feeds/ cleans up after pet? Where do the pets go to the bathroom?
2. What happens if the pet is sick?
3. What happens if the pet misbehaves?
4. Has the pet ever bitten or attacked anyone?

Drug/Alcohol Use by Caregiver

Goal: To assess how the caregivers' drug/alcohol use contributes to neglect.

1. Does anyone at your house use drugs/drink alcohol?
If yes: How do you know that someone uses drugs or alcohol in your house?
Have you ever been asked to try some drugs or alcohol when in your home?
2. What did it smell like/look like/taste like?
3. How did they act afterwards? How did they sound?

Caregiver Mental/Physical Health Issues

Goal: To determine whether caregiver physical or mental health problems contribute to neglect.

1. Does (caregiver) ever act sad?
If yes: What do they do? What do you do?
2. Does (caregiver) ever say things that don't make sense?
If yes: What do you do?
3. Have you had to help (caregiver)? How?
4. What does grandmother/other adult caregiver say about this?

*Much of the material for this table comes from a multidisciplinary project to create a "guidebook" for counties to use in designing a child neglect protocol, written by professionals from Dane county, Wisconsin (unpublished) and from Faller KC⁸³.

Appendix E: Physical Exam Template for Suspected Child Neglect

General: Vital Signs: T: _____ Pulse: _____ RR: _____ BP: _____
Growth Parameters: Weight: _____ Height: _____ OFC: _____ (plot on growth chart;
plot prior measurements if available)
Child's general demeanor (appropriate vs. withdrawn, overly compliant, etc):

Does child report any pain or discomfort (e.g., itching)? _____

Does child report being hungry when asked? Yes: _____ No: _____

Is there evidence of child being hungry? (e.g., asking for food, eating voraciously when offered food, hoarding food provided): _____

State of clothing: (Circle all that apply)

Appropriate Dirty Ill-fitting Worn/torn Inappropriate for weather Malodorous

Do shoes fit? Yes: _____ No: _____

Skin/Hair:

Hygiene:

Cleanliness of hair/skin/nails:

Foul odor: Yes: _____ No: _____

Presence of feces/urine (amount, distribution, old vs. recent): Yes: ____ No: ____

Presence of skin/scalp disease and degree of severity:

Evidence of treatment of disease?

Cutaneous injuries suspicious for physical abuse (injuries in ordinarily protected areas of the body, such as soft portion of cheeks, neck, torso, buttocks and inner thighs)?

(A diagram is very helpful, and photographs are highly desirable.)

HEENT:

Foreign body in external auditory canals or nose? Yes: _____ No : _____

Specify: _____

Evidence of infection? Yes: _____ No: _____ Specify: _____

Evidence of treatment? Yes: _____ No: _____ Specify: _____

Evidence of trauma? Yes: _____ No: _____ Specify: _____

Condition of teeth: _____

Anogenital Exam:

Tanner stage: _____

Evidence of trauma (old or new): Yes: _____ No: _____ Specify: _____

Hygiene (e.g., dried stool within vagina)? _____

Evidence of disease: Yes: _____ No: _____ Specify: _____

Remainder of Physical Exam:

Evidence of disease? (Describe) _____

Evidence of disease treatment? _____

Evidence of injury? _____

Evidence of dehydration? (obtain electrolytes, BUN/Creatinine, Hct as soon as possible – before rehydration.)

Developmental Assessment:

Basic screening test for developmental delays (e.g., Denver Developmental Screening Test) _____

For Cases of Possible Malnutrition: (Circle all that apply)

- Decreased pulse, temperature and/or blood pressure
- Listless, apathetic look?
- Wasting/Stunting (check growth parameters)
- Skin quality:
 - Dry and fissured
 - Atrophic
 - Hyperpigmented
 - Hypopigmented
- Scalp hair:
 - Sparse and/or fragile
 - Alternating zones of pigmented, non-pigmented hair
- Atrophy of subcutaneous fat and muscle, with or without redundant skin folds
- Protruberant ribs, clavicles, facial bones
- Sunken eyes, cheeks
- Hepatomegaly
- Protuberant abdomen
- Hypotonia
- Heart murmur from anemia
- Edema
- Consider obtaining labs:
Electrolytes, BUN, Creatinine, Calcium, phosphorous, magnesium, total protein, albumin and prealbumin, liver function tests, CBC, lead, urinalysis, Vitamin B12
Vitamin D labs, zinc.

Consider the possibility of co-existing physical abuse.

References

1. US Department of Health and Human Services, Youth and Families. Child Maltreatment, 2005. Washington D.C.: U.S. Government Printing Office; 2007.
2. Jones LM, Finkelhor D, Halter S. Child maltreatment trends in the 1990s: Why does neglect differ from sexual and physical abuse? *Child Maltreatment* 2006;11(2):107-20.
3. Dubowitz H, Pitts SC, Black MM. Measurement of three major subtypes of child neglect. *Child Maltreatment* 2004;9(4):344-56.
4. Helfer RE. The neglect of our children. *Pediatric Clinics of North America* 1990;37(4):923-42.
5. Lally JR. Three views of child neglect: Expanding visions of preventive intervention. *Child Abuse & Neglect* 1984;8(2):243-54.
6. Polonko K. Exploring assumptions about child neglect in relation to the broader field of child maltreatment. *JHSA* 2006;Winter:260-84.
7. Coohy C. Defining and classifying supervisory neglect. *Child Maltreatment* 2003;8(2):145-56.
8. Child Neglect. American Humane Society (Accessed October 1, 2007) http://www.americanhumane.org/site/PageServer?pagename=nr_fact_sheets_childneglect.)
9. Straus MA, Kantor GK. Definition and measurement of neglectful behavior: some principles and guidelines. *Child Abuse & Neglect* 2005;29(1):19-29.
10. Polansky N, Chalmer MA, Williams D. Assessing adequacy of child rearing: An urban scale. *Child Welfare* 1987;57:439-49.
11. Dubowitz H, Klockner A, Starr R, et al. Community and professional definitions of neglect. *Child Maltreatment* 1998;3:235-43.
12. Polansky N, Williams D. Class orientation to child neglect. *Social Work* 1978:397-401.
13. Goodvin R, Johnson D, Hardy S, Graef M, Chambers J. Development and confirmatory factor analysis of the Community Norms of Child Neglect scale. *Child Maltreatment* 2007;12(1):68-85.
14. Perez CM, Widom CS. Childhood victimization and long-term intellectual and academic outcomes. *Child Abuse & Neglect* 1994;18(8):617-33.
15. Egeland B, Sroufe LA, Erickson M. The developmental consequences of different patterns of maltreatment. *Child Abuse & Neglect* 1983;7(4):459-69.
16. Perry B, Pollard D. Altered brain development following global neglect in early childhood. In: *Society for Neuroscience: Proceedings from annual meeting*. New Orleans; 1997.
17. Howing PT, Wodarski JS, Kurtz PD, Gaudin JM, Jr. *Maltreatment and the school-age child: Developmental outcomes and system issues*. New York: The Haworth Press; 1993.
18. Hindley N, Ramchandani PG, Jones DPH. Risk factors for recurrence of maltreatment: A systematic review. *Archives of Disease in Childhood* 2006;91(9):744-52.

19. Bolger KE, Patterson CJ, Kupersmidt JB. Peer relationships and self-esteem among children who have been maltreated. *Child Development* 1998;69(4): 1171-97.
20. Coohy C, Zhang Y. The role of men in chronic supervisory neglect. *Child Maltreatment* 2006;11(1):27-33.
21. Dube SR, Felitti VJ, Dong M, Chapman DP, Giles WH, Anda RF. Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: The adverse childhood experiences study. *Pediatrics* 2003;111(3):564-72.
22. Arata C, Langhinrichsen-Rohling J, Bowers D, O'Brien N. Differential correlates of multi-type maltreatment among urban youth. *Child Abuse & Neglect* 2007;31:393-415.
23. Finkelhor D, Ormrod R, Turner H. Polyvictimization: A neglected component in child victimization. *Child Abuse & Neglect* 2007;31:7-26.
24. Belsky J. Child maltreatment: an ecological integration. *American Psychologist* 1980;35(4):320-35.
25. Polansky N. *Damaged parents: An anatomy of child neglect*. Chicago: University of Chicago; 1981.
26. Trickett PK, McBride-Chang C. The developmental impact of different forms of child abuse and neglect. *Developmental Review* 1995;15:311-37.
27. Erickson M, Egeland B, Pianta R. The effects of maltreatment on the development of young children. In: Cicchetti D, Carlson V, eds. *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect*. Cambridge University Press; 1989:203-53.
28. Squires T, Busuttill A. Child fatalities in Scottish house fires 1980-1990: a case of child neglect? *Child Abuse & Neglect* 1995;19(7):865-73.
29. Kardon E. Toxicity, caustic ingestions. *E-Medicine*; <http://www.emedicine.com/emerg/topic86.htm> 2004.
30. Chandra R, Kumari S. Nutrition and immunity. *J Nutr* 1994;124(suppl):1433S–5S.
31. Chevalier P, Sevilla R, Sejas R, Zalles L, et al. Immune recovery of malnourished children takes longer than nutritional recovery: Implications for treatment and discharge. *Top Pediatr* 1998;44:304-7.
32. Heath M, Sidbury R. Cutaneous manifestations of nutritional deficiency. *Current Opin Ped* 2006;18(4):417-22.
33. Scott E. Developing a rational approach to hygiene in the domestic setting. *Journal of Infection* 2001;43(1):45-9.
34. Bloomfield S. Gastrointestinal disease in the domestic setting: What are the issues? *Journal of Infection* 2001;43(1):23-9.
35. Humphrey T. The spread and persistence of *Campylobacter* and *Salmonella* in the domestic kitchen. *Journal of Infection* 2001;43(1):50-3.
36. Vipond IB. The role of viruses in gastrointestinal disease in the home. *Journal of Infection* 2001;43(1):38-40.
37. Prevention CDC. Diagnosis and management of foodborne illnesses: A primer for physicians. *Morbidity and Mortality Weekly Report* 2001;50(RR-2).

38. Prevention CDC. Preliminary FoodNet data on the incidence of foodborne illnesses--Selected sites, United States, 2002. *Morbidity and Mortality Weekly Report* 2003;52(15):340-3.
39. Clinical Syndromes Associated With Foodborne Diseases. In: LK Pickering, ed. *Red Book: 2006 Report of the Committee on Infectious Diseases*. 27 ed. Elk Grove Village, IL: American Academy of Pediatrics; 2006:857-60.
40. Lindsay JA. Chronic sequelae of foodborne disease.[see comment]. *Emerging Infectious Diseases* 1997;3(4):443-52.
41. Willshaw G, Thurwell J, Jones A, et al. Vero cytotoxic E coli 0157 in beef burger linked to an outbreak of diarrhea, haemorrhagic colitis and haemolytic uraemic syndrome in Britain. *Lett Appl Microbiol* 1994;19:304-7.
42. O'Brien S. Gastrointestinal disease in the domestic setting: what can we deduce from surveillance data? *Journal of Infection* 2001;43(1):36-7.
43. Clark DB, Thatcher DL, Maisto SA. Adolescent neglect and alcohol use disorders in two-parent families. *Child Maltreatment* 2004;9(4):357-70.
44. Hussey JM, Chang JJ, Kotch JB. Child maltreatment in the United States: prevalence, risk factors, and adolescent health consequences. *Pediatrics* 2006;118(3):933-42.
45. Cook JT, Frank DA, Levenson SM, et al. Child food insecurity increases risks posed by household food insecurity to young children's health. *Journal of Nutrition* 2006;136(4):1073-6.
46. Lissau I, Sorensen TI. Parental neglect during childhood and increased risk of obesity in young adulthood. *Lancet* 1994;343(8893):324-7.
47. Dong M, Dube SR, Felitti VJ, Giles WH, Anda RF. Adverse childhood experiences and self-reported liver disease: New insights into the causal pathway.[see comment]. *Archives of Internal Medicine* 2003;163(16):1949-56.
48. Dong M, Giels W, Felitti V, Dube S, et al. Insights into causal pathways for ischemic heart disease: Adverse childhood experiences study. *Circulation* 2004;110:1761-6.
49. Harlow H, Dodsworth R, Harlow M. Total social isolation in monkeys. *Proc NAS* 1965;54:90-7.
50. Harlow H, Harlow M, Suomi S. From thought to therapy: Lessons from a primate laboratory. *American Scientist* 1971;59:538-49.
51. Rutter M, English and Romanian Adoptees (ERA) study team. Developmental catch-up, and deficit, following adoption after severe global early privation. *J Child Psychol, Psychiat* 1998;39(4):465-76.
52. Suomi S. Early determinants of behaviour: Evidence from primate studies. *Br Med Bull* 1997;53(1):170-84.
53. Caldji C, Tannenbaum B, Sharma S, Francis D, Plotsky P, al e. Maternal care during infancy regulates the development of neural systems mediating the expression of fearfulness in the rat. *Proc NAS* 1998;95:5335-40.
54. Chugani H, Behen M, Muzik O, Juhasz C, Nagy F, et al. Local brain functional activity following early deprivation: A study of postinstitutionalized Romanian orphans. *NeuroImage* 2001;14:1290-301.
55. Kuhn C, Pauk J, Schanberg S. Endocrine responses to mother-infant separation in developing rats. *Dev Psychobiol* 1990;23(5):395-410.

56. Meaney M, Diorio J, Francis D, Widdowson J, P L, et al. Early environmental regulation of forebrain glucocorticoid receptor gene expression: Implications for adrenocortical responses to stress. *Dev Neurosci* 1996;18(1-2):49-72.
57. Plotsky P, Meaney M. Early postnatal experience alters hypothalamic corticotropin-releasing factor (CRF) mRNA, median eminence CRF content and stress-induced release in rats. *Mol Brain Res* 1993;18:195-200.
58. Sanchez M, Hearn E, Do D, Rilling J, Herndon J. Differential rearing affects corpus callosum size and cognitive function of rhesus monkeys. *Brain Research* 1998;812:38-49.
59. Glaser D. Child abuse and neglect and the brain--a review.[erratum appears in *J Child Psychol Psychiatry* 2000 Nov;41(8):1076]. *Journal of Child Psychology & Psychiatry & Allied Disciplines* 2000;41(1):97-116.
60. Teicher MH, Andersen SL, Polcari A, Anderson CM, Navalta CP. Developmental neurobiology of childhood stress and trauma. *Psychiatric Clinics of North America* 2002;25(2):397-426.
61. DeBellis M. The psychobiology of neglect. *Child Maltreatment* 2005;10(2):150-72.
62. Corbett S, Drewett R. To what extent is failure to thrive in infancy associated with poorer cognitive development? A review and meta-analysis. *J Child Psychol, Psychiat* 2004;45(3):641-54.
63. Oates R. Long-term effects of non-organic failure to thrive. *Pediatrics* 1985;75:36-40.
64. Mackner LM, Starr RH, Jr., Black MM. The cumulative effect of neglect and failure to thrive on cognitive functioning. *Child Abuse & Neglect* 1997;21(7):691-700.
65. Dubowitz H, Papas MA, Black MM, Starr RH, Jr. Child neglect: Outcomes in high-risk urban preschoolers. *Pediatrics* 2002;109(6):1100-7.
66. Bayley N. *The Bayley Scales of Infant Development*. New York: The Psychological Corporation; 1969.
67. Allen R, Oliver J. The effects of child maltreatment on language development. *Child Abuse & Neglect* 1982;6(3):299-305.
68. Kurtz PD, Gaudin JM, Jr., Wodarski JS, Howing PT. Maltreatment and the school-aged child: School performance consequences. *Child Abuse & Neglect* 1993;17(5):581-9.
69. Wechsler D. *Wechsler preschool and primary scale of intelligence*. New York: The Psychological Corporation; 1967.
70. Kendall-Tackett K, Eckenrode J. The effects of neglect on academic achievement and disciplinary problems: A developmental perspective. *Child Abuse & Neglect* 1996;20(3):161-9.
71. Kaufman JG, Spatz Widom C. Childhood victimization, running away, and delinquency. *Journal of Research in Crime and Delinquency* 1999;36(4):347-70.
72. Maxfield MG, Widom CS. The cycle of violence. Revisited 6 years later. *Archives of Pediatrics & Adolescent Medicine* 1996;150(4):390-5.
73. Widom CS, Kuhns JB. Childhood victimization and subsequent risk for promiscuity, prostitution, and teenage pregnancy: A prospective study. *American Journal of Public Health* 1996;86(11):1607-12.

Challenges in the Evaluation of Child Neglect **APSAC Practice Guidelines**

74. Schilling E, Aseltine R, Gore S. Adverse childhood experiences and mental health in young adults: A longitudinal survey. *BMC Public Health* 2007;7:30-40.
75. Johnson JG, Smailes EM, Cohen P, Brown J, Bernstein DP. Associations between four types of childhood neglect and personality disorder symptoms during adolescence and early adulthood: Findings of a community-based longitudinal study. *Journal of Personality Disorders* 2000;14(2):171-87.
76. Grogan-Kaylor A, Otis MD. The effect of childhood maltreatment on adult criminality: A tobit regression analysis. *Child Maltreatment* 2003;8(2):129-37.
77. Farst K, Duncan JM, Moss M, Ray RM, Kokoska E, James LP. Methamphetamine exposure presenting as caustic ingestions in children. *Annals of Emergency Medicine* 2007;49(3):341-3.
78. Grant P. Evaluation of children removed from a clandestine methamphetamine laboratory. *Journal of Emergency Nursing* 2007;33(1):31-41.
79. Martyny JW, Arbuckle SL, McCammon CS, Erb N. Chemical exposures associated with clandestine methamphetamine laboratories using the anhydrous ammonia method of production. Colorado Alliance for Drug Endangered Children.
<http://www.colodec.org/medandresearch/documents/Ammonia%20Meth%20Report.pdf> (Accessed September 23, 2007)
80. Watson-Perczel M, Lutzker JR, Greene BF, McGimpsey BJ. Assessment and modification of home cleanliness among families adjudicated for child neglect. *Behavior Modification* 1988;12(1):57-81.
81. Tertinger DA, Greene BF, Lutzker JR. Home safety: development and validation of one component of an ecobehavioral treatment program for abused and neglected children. *Journal of Applied Behavior Analysis* 1984;17(2):159-74.
82. Lutzker J. unpublished data
83. Faller K. Focused questions for interviewing children suspected of maltreatment and other traumatic experiences. *APSAC Advisor* 1999;12(1):14-8.
84. Dubowitz H, Black M. Child Neglect. In: Reece R, Christian C, eds. *Child Abuse: Medical Diagnosis and Management* 3rd Ed ed; in press.